

REMARKS

The Final Office Action dated July 13, 2006 has been carefully considered. Claims 3-26 are pending. The following remarks are presented in a sincere attempt to place this Application in condition for allowance. Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Claims 10, 11, 14-16, and 20-21 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Examiner asserts that Claim 9 requires that “the reduced active set comprises more than one member.” Further, the Examiner asserts that Claim 10 contradicts Claim 9 because Claim 10 recites that the number of members is equal to 1. However, the Applicants respectfully submit that Claim 9 recites “if (emphasis added) the reduced active set comprises more than one member.” Thus, Claim 9 allows the set to equal one member or some other number of members. Accordingly, Claim 10 may recite “if the number of members of the set ... is equal to one” without contradicting Claim 9.

Claims 14-16 depend upon and further limit Claims 9-11. Hence, for at least the aforementioned reasons these claims should also be allowable. For similar reasons, the Applicants respectfully submit that claims 20-21 are also allowable.

Claim 3, 5, 16, and 22-23 stand rejected under 35 U.S.C. §103(a) by U.S. Patent No. 6,516,196 to Chen et al. (“Chen”) in view of U.S. Patent No. 6,430,414 to Sorokine et al. (“Sorokine”) and further in view of allegedly admitted prior art (“AAPA”). Insofar as they may be applied against the Claims, these rejections are respectfully traversed.

Rejected independent Claim 3 particularly recites one of the distinguishing characteristics of the present invention, namely, “a base station controller (BSC), comprising an active set generator

and a reduced active set generator, wherein the reduced active set generator employs output of the active set generator, and wherein the BSC is configured to send indicia of the reduced active set to at least one Base Transceiver Station (BTS) and wherein each BTS of the reduced active set transmits control information over a reverse dedicated congestion control channel (RDCCCH) if the reduced active set comprises more than one BTS” (emphasis added).

Regarding Claim 3, Chen was cited as assertedly fully disclosing the following: (1) a base station controller (BSC), (2) an active set generator, (3) a reduced active set generator, wherein the reduced active set generator employs output of the active set generator, (4) a BSC, (5) configured to send indicia of the reduced active set, and (6) wherein more than one BTS of the reduced active set transmits control information over a control channel (emphasis added). Sorokine was cited as assertedly fully disclosing a BSC that sends to a BS (BTS) a NLU (equivalent to claimed reduced active set or subset). Additionally, the AAPA was cited as assertedly fully disclosing that these are particular requirements of conventional CDMA systems. The Examiner further stated that it would have been obvious to combine the teachings of Chen, Sorokine, and the AAPA in order to comply with system requirements as taught by AAPA and because this would have been the best engineering design choice.

However, Chen is generally directed toward increasing the allocation of bandwidth, particularly for high-speed data services. Further, Chen evaluates the data rates of different combinations of BTSs that may be in connection with a particular mobile station (MS) and allocates an appropriate data rate for the MS and makes allocation of system resources more efficient in a multi-user environment (emphasis added, see the Abstract). More particularly, Chen describes that the maximum of the affordable data rates of all of the reduced active sets (or subsets) is selected to be the data rate for the particular BTS-MS path for maximum throughput and loading efficiency

(emphasis added, see column 9, lines 38-43). Thus, Chen assigns a single data rate (i.e., “the” maximum data rate) for a particular MS.

Moreover, if the MS receives two different data rate commands (from different BTSs) the MS will transmit at the lower rate designated by the two BTSs (see the Specification, page 3, lines 3-5). Accordingly, for the Chen MS to transmit at the appropriate, single data rate only the BTS associated with the appropriate, single data rate may send control information to the MS. Otherwise, the MS will not transmit at the appropriate rate. Necessarily then, only one BTS described by Chen can transmit control information to the MS. Since Chen describes a system in which only one BTS transmits control information, Chen teaches away from a system in which each BTS transmits control information over a reverse dedicated congestion control channel (RDCCCH) if the reduced active set comprises more than one BTS. Because Chen teaches away from the claimed invention, Applicants respectfully submit that Chen can not be used alone, or in combination with Sorokine or the AAPA to render the claimed invention obvious.

With regard to the other references, the Examiner only relies on Sorokine to teach a BTS that sends a NLUM. On this issue, the Applicants agree with the Examiner that Sorokine only teaches, suggest, or describes a BTS that transmits the NLUM. Furthermore, Sorokine describes that one measure of the efficiency improvement is the ability to perform an early and quick handoff as a benefit from the dynamically optimized NL and the inclusion of autonomous EHDm. Thus, Sorokine is directed toward early and quick handoffs of MS between BTSs. In contrast, Claim 3 recites if the reduced active set comprises more than one BTS (i.e., when the MS is in soft handoff). Since Sorokine is directed to early and quick handoffs rather than the time an MS is in soft handoff, the Applicants respectfully submit that a person of ordinary skill in the art would have no motivation to modify Chen with Sorokine to provide the claimed invention. Thus, as with Chen, the

Applicants respectfully submit that Sorokine can not properly be combined to render claim 3 as obvious.

With regard now to the AAPA, the Examiner only relies on the AAPA for teaching conventional CDMA systems. However, it is improper to combine either Chen or Sorokine with the AAPA (or other art) because Chen teaches away from the present invention and because no motivation exists to use Sorokine to modify Chen. Accordingly, the Applicants respectfully submit that the proposed combination fails to render the claimed invention obvious.

In view of the foregoing, it is apparent that the cited references do not disclose, teach or suggest the unique combination now recited in amended Claim 3. Applicants therefore respectfully submit that Claim 3 is clearly and precisely distinguishable over the cited references in a patentable sense, and is therefore allowable over these references and the remaining references of record. Accordingly, Applicants respectfully request that the rejection of Claim 3 under 35 U.S.C. § 103(a) be withdrawn and that Claim 3 be allowed.

Claim 5 depends on and further limits Claim 3. Hence, for at least the aforementioned reasons, Claim 5 should be deemed to be in condition for allowance. Applicants respectfully request that the rejection of the dependent Claim 5 also be withdrawn.

Applicants contend that the rejection of Claims 16 and 22-23 are overcome for at least some of the reasons that the rejection of Claim 3 is overcome. These reasons include that it is improper to combine either Chen or Sorokine to render the claimed invention obvious. Applicants therefore respectfully submit that Claims 16 and 22-23 are clearly and precisely distinguishable over the cited references in any allowable combination.

Claim 4 stands rejected under 35 U.S.C. §103(a) by Chen, in view of Sorokine, in further view of the AAPA, and further in view of U.S. Patent No. 6,430,414 to Rohani ("Rohani). Insofar as they may be applied against the Claim, this rejection is respectfully traversed.

Rejected Claim 4 particularly incorporates one of the distinguishing characteristics of the present invention, namely, "a reduced active set generator ... wherein each BTS of the reduced active set transmits control information over a reverse dedicated congestion control channel (RDCCCH) if the reduced active set comprises more than one BTS."

Regarding Claim 4, the combination of Chen, Sorokine, and the AAPA was cited as assertedly fully disclosing the following: everything as claimed by Claim 3. Rohani was cited as assertedly fully disclosing the following: wherein the reduced set generator employs reverse link and forward link channel signal strength to determine members of the reduced active set. The Examiner further stated that it would have been obvious to combine the teachings of Chen, Sorokine, the AAPA, and Rohani for the advantage of obtaining more accurate results.

However, as set forth above, it is improper to use either Chen or Sorokine alone, or in combination to reject the claimed invention. Accordingly, the Applicants respectfully submit that using Rohani in combination with Chen and Sorokine to render the claimed invention obvious under 35 U.S.S. § 103(a) is improper.

Applicants therefore submit that Claim 4 is clearly and precisely distinguishable over the cited references in a patentable sense, and is therefore allowable over these references and the remaining references of record. Accordingly, Applicants respectfully request that the rejection of Claim 4 under 35 U.S.C. § 103(a) be withdrawn and that Claim 4 be allowed.

Claims 17-21 and 24-26 stand rejected under 35 U.S.C. §102 by Chen. Insofar as it may be applied against the Claims, these rejections are respectfully traversed.

Rejected independent Claim 17 particularly recites one of the distinguishing characteristics of the present invention, namely, “a reduced active set generator ... wherein each BTS of the reduced active set transmits control information over a reverse dedicated congestion control channel (RDCCCH) if the reduced active set comprises more than one BTS.” (Emphasis added.)

Regarding Claim 17, Chen was cited as assertedly fully disclosing the following: (1) a method for dynamically switching between explicit reverse link channel data rate control and reverse link channel data rate congestion control, comprising (2) generating a reduced active set, (3) transmitting indicia of the reduced active set to an MS, and (4) if the number of members of the reduced active set is greater than one, transmitting reverse link channel data rate control information from each member of the reduced active set (reduced active set is used for congestion control). The Examiner further appears to have asserted that the reduced active set is inherently used for congestion control if the number of members of the reduced active set is greater than one).

However, as set forth previously, Chen fails to disclose each BTS of the reduced active set transmitting control information. Indeed, Chen describes a system wherein only one BTS may transmit control information to the MS. Accordingly, the Applicants respectfully submit that Chen fails to anticipate Claim 17 inherently or otherwise.

In view of the foregoing, it is apparent that the cited reference does not disclose, teach or suggest the unique combination now recited in amended Claim 17. Applicants therefore submit that Claim 17 is clearly and precisely distinguishable over the cited reference in a patentable sense, and is therefore allowable over this reference and the remaining references of record. Accordingly, Applicants respectfully request that the rejection of Claim 17 under 35 U.S.C. § 102 be withdrawn and that Claim 17 be allowed.

Claims 18-21 depend on and further limit Claim 17. Hence, for at least the aforementioned reasons, these Claims should be deemed to be in condition for allowance. Applicants respectfully request that the rejections of the dependent Claims 18-21 also be withdrawn.

Applicants contend that the rejection of Claims 24-26 are overcome for at least some of the reasons that the rejection of Claim 17 is overcome. These reasons include Chen not disclosing, teaching, or suggesting “a reduced active set generator ... wherein each BTS of the reduced active set transmits control information over a reverse dedicated congestion control channel (RDCCCH) if the reduced active set comprises more than one BTS.” (Emphasis added.) Applicants therefore respectfully submit that Claims 24-26 are clearly and precisely distinguishable over the cited references in any combination.

Applicants have now made an earnest attempt to place this Application in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 3-26.

Applicants do not believe that any fees are due; however, in the event that any fees are due, the Commissioner is hereby authorized to charge any required fees due (other than issue fees), and to credit any overpayment made, in connection with the filing of this paper to Deposit Account No. 50-0605 of CARR LLP.

Should the Examiner deem that any further amendment is desirable to place this Application in condition for allowance, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

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